

(19)



Europäisches Patentamt  
European Patent Office  
Office européen des brevets



(11) Publication number:

**0 600 532 A3**

(12)

## EUROPEAN PATENT APPLICATION

(21) Application number: **93203241.0**

(51) Int. Cl.<sup>6</sup>: **A61K 49/04, A61K 47/48**

(22) Date of filing: **18.11.93**

(30) Priority: **04.12.92 US 987904**

(43) Date of publication of application:  
**08.06.94 Bulletin 94/23**

(84) Designated Contracting States:  
**AT BE CH DE DK ES FR GB GR IE IT LI LU MC  
NL PT SE**

(98) Date of deferred publication of the search report:  
**22.02.95 Bulletin 95/08**

(71) Applicant: **EASTMAN KODAK COMPANY**  
**343 State Street**  
**Rochester,**  
**New York 14650 (US)**

(72) Inventor: **Na, George C., c/o STERLING  
WINTHROP INC.**  
**90 Park Avenue**  
**New York,**  
**New York 10016 (US)**  
Inventor: **Rajagopalan, Natarajan, c/o**  
**STERLING WINTHROP INC.**  
**90 Park Avenue**  
**New York,**  
**New York 10016 (US)**

(74) Representative: **Haile, Helen Cynthia et al**  
**Kodak Limited**  
**Patent Department**  
**Headstone Drive**  
**Harrow,**  
**Middlesex HA1 4TY (GB)**

(54) **Use of ionic cloud point modifiers to prevent particle aggregation during sterilization.**

(57) A composition comprising nanoparticles having a surface modifier adsorbed on the surface thereof and an anionic or cationic surfactant as a cloud point modifier associated therewith, which cloud point modifier is present in an amount sufficient to increase the cloud point of the surface modifier, and methods of making such nanoparticles are described. A preferred surface modifier is tyloxapol, preferred anionic surfactants are dioctylsulfosuccinate, sodium dodecyl sulfate and sodium oleate and preferred cationic surfactants are dodecyltrimethylammonium bromide, tetradecyltrimethyl ammonium bromide and cetyltrimethylammonium bromide.

**EP 0 600 532 A3**



European Patent  
Office

## EUROPEAN SEARCH REPORT

Application Number  
EP 93 20 3241

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
D,A	EP-A-0 498 482 (STERLING WINTHROP INC.) * page 3, line 18 - line 21 * * page 7, line 1 - line 38 * * page 10, line 26 - line 43 * * page 11, line 1 - line 4 * & US-A-5 145 684 ---	1-14	A61K49/04 A61K47/48
E	EP-A-0 601 619 (STERLING WINTHROP INC.) * page 2, line 53 - page 3, line 18 * * page 5, line 15 - line 25 * & NO-A-934 144 ---	1-14	
E	EP-A-0 601 618 (STERLING WINTHROP) * page 1, line 50 - line 57 * * page 4, line 43 - line 57; claims 2,3 * & FI-A-935 305 ---	1-4,7-14	
E	EP-A-0 605 024 (STERLING WINTHROP INC.) * page 2, line 54 - page 3, line 16 * * page 5, line 40 - line 52; claims 1-3 * & NO-A-934 271 ---	1-14	
E	EP-A-0 577 215 (STERLING WINTHROP) * claims * ---	1-3,5-14	A61K
E	EP-A-0 602 702 (STERLING WINTHROP) * the whole document * -----	1-14	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 21 December 1994	Examiner Berte, M
<b>CATEGORY OF CITED DOCUMENTS</b> X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			